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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,681	03/14/2002	Virgilio Borges Loureiro	211341US0XPCT	8291

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EXAMINER

GUO, LYND A T

ART UNIT

PAPER NUMBER

1651

DATE MAILED: 12/17/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/926,681

Applicant(s)

LOUREIRO ET AL.

Examiner

Lynda T Guo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Status of the Application

The Preliminary Amendment (Paper No. 8) received on 14 March 2002 has been entered.

Claims 1-20 of the present Application are pending.

Specification

1. The disclosure is objected to because of the following informalities:

The present Specification appears to be a draft copy (e.g. pages 2, 6, 7, 9 and 10 recites "Amended Sheet" whereas the other pages do not). A clean copy of the Specification would be appreciated.

There are several grammatical errors throughout the present Specification (see below).

On page 2, line 15, the word "species" is a possessive noun and thus requires an apostrophe.

On page 3, lines 2-5, the sentence is awkward, especially the segment stating, "which much faster development disallow their detection".

On page 4, lines 3-4, the sentence, "The medium object of the invention..." is awkward.

On page 1, line 25 and page 3, line 18, the word "subtract(s)" is queried.

On page 7, lines 1-7, it is unclear what the numbers in parentheses are referring to.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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3. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 1, it is unclear what qualifies the yeasts as being "sensitive" and it is unclear what the yeasts are "sensitive" to.

In Claims 4 and 10, "Yeast Nitrogen Base" is indefinite because there are numerous formulations of "Yeast Nitrogen Base" commercially available and the present Specification does not define this particular component of the claimed invention.

In Claims 7 and 10, the term "strong" is a relative term which renders the claim indefinite. The term "strong" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

In Claim 6, "the pH indicator" lacks antecedent basis.

Claim 8 recites, "in the **amounts** of 0.1 g/L", however, only **one** amount is claimed.

The term "adequate" in Claim 13 is a relative term which renders the claim indefinite. The term "adequate" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

The wording of Claim 13 is grammatically incorrect, thus it is unclear as to what Applicant is claiming.

Claims 12-14 are drawn to a process, however, no steps are recited in the claims. Standard method steps include contacting, determining and correlating. None of these steps are included in the Claims.

4. Claims 15-20 provides for the use of a culture medium according to Claim 1, but, since the claim does not set forth any steps involved in the method/process, it is unclear what

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method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 15-20 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Allowable Subject Matter

5. The closest prior art found are the following public disclosures: Heresztyn (1986), Chatonnet, et al. (1992), and Licker, et al. (1997). Summaries of the disclosures follow.

Heresztyn teaches that the formation of 4-ethylphenol from *p*-coumaric acid is characteristic of yeasts in the *Brettanomyces* and *Dekkera* genera. (See entire Abstract.)

Licker discloses that *Brettanomyces* yeast has characteristically slow growth, thus in cultures where other yeast genera are present (e.g. *Saccharomyces*, *Kloeckera*, *Metschnikowia*, *Pichia*, *Candida*, etc.), the earlier development of these other yeasts hinders the detection of *Brettanomyces*. Licker also discloses that the addition of cyclohexamide to the medium aids in the selective detection of *Brettanomyces* yeast. (See page 4, paragraph 2 under "*Brettanomyces* detection".)

Chatonnet teaches that the only yeasts capable of synthesizing 4-ethylphenol from *p*-coumaric acid are those in the genus *Brettanomyces/Dekkera*. Chatonnet also teaches of a solid media for

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culturing *Brettanomyces/Dekkera* yeasts. This medium comprises agar, nutrition components, bromocresol green, cyclohexamide, and ethanol, the latter resulting from the addition of penicillin, gentamicin sodium sulphate and diphenyl in ethanol-solution to the medium. The pH is adjusted to 4.8. (See page 167, column 1, lines 37-51 and page 171, column 2, lines 15-19.) The prior art of record teaches a way of selecting for *Brettanomyces/Dekkera* yeasts (e.g. by including antibiotics in the medium to inhibit interference from other yeasts, as disclosed by Licker, et al.). It is also known that *p*-coumaric acid is preferentially transformed into 4-ethylphenol by yeasts of these genera. Thus, it would have been obvious to include *p*-coumaric acid into medium selective for these yeasts. In fact, a yeast medium, as disclosed by Chatonnet, is significantly similar in composition to the medium claimed in the present application. However, the single differing aspect of Applicant's invention is the use of ethanol "**as the only energy source**" for the yeast. No art of record has taught the use of ethanol "**as the only energy source**" when selecting for *Brettanomyces/Dekkera* yeasts. Therefore, the differential medium, as claimed by Applicant is deemed novel because of this single technical feature.

6. Independent Claims 1, 10 and 12 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.
7. Dependent Claims 2-9, 11 and 13-20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
8. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda T Guo whose telephone number is (703) 605-1200. The examiner can normally be reached on Mon - Fri (8:00am - 4:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G Wityshyn can be reached on (703) 308-4743. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3014 for regular communications and (703) 872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.



Lynda T Guo
Patent Examiner
December 16, 2002



RALPH GITOW
PRIMARY EXAMINER
GROUP 1200